

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant	:	Jensen et al.		
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Examiner	:	Strange, Aaron N.		
Docket No.	:	1020.P10678		

Mail Stop Appeal Brief
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RELY BRIEF

This Reply Brief is in response to the Examiner's Answer mailed on December 28, 2007. The Reply Brief contains the following sections in the order set forth below:

- I. STATUS OF CLAIMS
- II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
- III. ARGUMENT

I. STATUS OF CLAIMS

Claims originally filed: 1-18

Claims canceled: None

Claims withdrawn from consideration: None

Claims allowed: None

Claims objected to: None

Claims rejected: 1-18

Claims on appeal: 1-18

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 2-5, 7, 8-12, and 14-16 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 6,421,733 to Tso et al. ("Tso") and WinRoute Pro 3.0 User's Manual ("WinRoute") and U.S. Patent No. 5,991,306 to Burns ("Burns").

Whether claims 6 and 13 are unpatentable over Tso and WinRoute and Burns in view of well-known Internet standards.

III. ARGUMENT

Claims 1, 2-5, 7, 8-12, and 14-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,421,733 to Tso et al. ("Tso") and WinRoute Pro 3.0 User's Manual ("WinRoute") and U.S. Patent No. 5,991,306 to Burns ("Burns").

Claims 6 and 13 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Tso and WinRoute and Burns in view of well-known Internet standards.

Among its other elements, independent claim 1 recites “deleting said information at the network node upon delivery of said information to said client.” Among its other elements, independent claim 8 recites “deleting said information at the second network node upon delivery of said information to said first network node.” Among its other elements, independent claim 15 recites “deleting said information at the network node upon delivery of said information to said client.”

In the Final Office Action, independent claims 1, 8, and 15 were rejected by the Examiner for substantially the same reasons. Namely, the Examiner asserts that while Tso and WinRoute do not disclose deleting information upon delivery to a client, it would have been obvious to implement a cache deletion policy disclosed by Burns within a Tso/WinRoute combined system in such a way as to delete requested information from a proxy cache upon delivery of the information to a client. The Examiner’s rationale for making such combination and modification is premised on managing the capacity limitations of a cache memory by deleting content as soon as possible to more efficiently utilize the cache memory.

Specifically, on pages 5-6 of the Final Office Action, the Examiner stated as follows:

Neither Tso nor WinRoute disclosed deleting said information upon delivery of said information to said client. Nonetheless it was widely known in the art at the time of Applicant’s invention that proxy caches such as those employed by both Tso and WinRoute have limited capacity, as evidenced by at least Burns. In an analogous proxy cache system (see inter alia Figure 2) Burns disclosed, “deletion policies are a function of... the constraints imposed by capacity limitations of the cache memory” (see Burns Col 11, lines 15-19). Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to implement a cache deletion

policy in the combined Tso and WinRoute system which deletes requested information from the proxy cache upon delivery of said information to a client, in order to manage the capacity limitations of the cache memory by deleting content as soon as possible and thus more efficiently utilizing the cache memory. The cache memory is more efficiently utilized since more users can have their requests cached when cache memory is freed up as soon as possible. In addition by caching more users' requests the system is able to more efficiently respond to the requests.

In the Answer, the Examiner states as follows:

While Tso, Winroute and Burns do describe a caching mechanism, mere disclosure of a caching mechanism which stores some cached items after delivery does not teach away from deleting other cached items immediately upon delivery to a client.

Tso contains limited teachings relating to deletion of cached content, stating only that the cache may "invalidate any non-locked object at any time" (col. 4, ll. 40-43). Likewise, WinRoute states only that caches objects are deleted when the cache size exceeds a predetermined limit (p.55, ¶6). Burns, on the other hand, described numerous cache expiration policies (col. 10, l. 48 to col. 11, l. 19). In particular, Burns teaches that deletion policies may be the function of "the content itself", "the subscriber patterns", and "constraints imposed by capacity limitations" (col. 11, ll. 15-19). Burns also teaches that certain types of content, such as those rarely or infrequently requested, are less desirable to cache.

When considering a cache deletion policy for a proxy that retrieves aborted client requests for subsequent retrieval, as taught by the combination of Tso and WinRoute, one of ordinary skill in the art would have been led by Burns to consider various factors such as the type of content, subscriber patterns, and the constraints imposed by the cache size. At least some of the aborted client requests would have contained content "rarely or infrequently requested" that would not normally be subject to caching (Burns; col. 10, ll. 54-55).

One of ordinary skill in the art would have seen a benefit to caching content associated with aborted requests (i.e.,

makes it easier to explore a web site; WinRoute p.55, ¶7) and deleting, upon delivery to the client, at least the content that would not normally be cached since it is requested rarely or infrequently. Caching the content associated with an aborted request until the client retrieves it reduces network traffic resulting from numerous aborted requests for the same content (particularly where high latency gives the user the perception that a web page has stopped loading), while deleting unwanted content ensures that the cache space is not occupied by content that is rarely or infrequently requested. Deleting the content immediately upon delivery is a merely a predictable variation of known cache deletion policies, and one which a person of ordinary skill in the art could have easily implemented.

Appellant respectfully submits that the Examiner's rejection is without merit. Appellant submits that even assuming *arguendo* the teachings of the cited references could be combined, which Appellant does not admit, the combined teachings of Tso, WinRoute, and Burns would not disclose or suggest combination and/or modification in such a way as to read on all the elements of amended independent claims 1, 8, and 15.

In particular, Tso, WinRoute, and Burns each describe a caching mechanism and thus teach away from deleting information upon delivery. Indeed, the WinRoute "Continue Aborted" feature teaches away from the deletion of information after delivery to a client having issued several requests for it, and is directed to solving a problem of a different nature.

With respect to deleting cached content, Burns teaches caching frequently requested content so that such content is available to subscribers before they request it. Accordingly, Burns fails to teach and indeed teaches away from deleting information at a network node upon delivery of the information to a client.

Regarding frequently requested content, Burns at most teaches deleting documents from cache memory according to certain deletion policies.

Regarding *infrequently requested content*, Burns teaches not caching such content at all and “foregoing caching resources that are rarely or infrequently requested.” See Burns at col. 10, ll. 53-55.

In the Answer, the Examiner first assumes that at least some of the aborted content requests would have contained content “rarely or infrequently requested.” Appellant submits that none of the references provides any explicit or implicit teaching or suggestion of determining whether an aborted client request contains content that is rarely or infrequently requested or determining whether an aborted content request is for content that is rarely or infrequently requested.

Next, the Examiner assumes that rarely or infrequently requested content is cached, which is in direct contrast to the teachings of Burns. Appellant submits that none of the references provides any explicit or implicit teaching of determining whether content associated with an aborted content request is rarely or infrequently requested.

Finally, the Examiner assumes that content associated with aborted requests is cached and that infrequently requested content that is not normally cached (but which is cached) is deleted upon delivery to the client. Appellant submits that none of the references provides any explicit or implicit teaching of determining whether cached content associated with an aborted content request is “rarely or infrequently requested” or “normally not cached” and, after making such a determination, deleting such content upon delivery to a client.

For at least these reasons, Appellant submits that the teachings of the Tso, WinRoute, and Burns would not motivate one of ordinary skill in the art to delete information at a network node upon delivery of the information to a client as recited in independent claims 1, 8, and 15.

Appellant disagrees with the rationale set forth in the Final Office Action and in the Answer. Appellant submits that the references teach away from the subject matter of claim 1, 8, and 15 and that the modifications proposed by the Examiner are contrary to the explicit teachings and principles of operation of the cited references.

Moreover, Appellant takes issue with the Examiner's characterization in the Answer as "merely a predictable variation" and "one which a person of ordinary skill in the art could have easily implemented." The fact remains that the Examiner's grounds of rejection are based on making a modification to a three-reference combination which is neither taught nor suggested. The use of such phrases suggests the Examiner's reliance on impermissible hindsight.

Appellant reminds the Examiner that a proper rationale is required to arrive at a conclusion of obviousness. *See* MPEP § 2145, for example. The Office cannot rely on impermissible hindsight in combining the teachings of the cited references to arrive at the claimed invention. To reach a proper determination of obviousness under 35 U.S.C. § 103(a), the Office must reach its conclusion on the basis of the facts gleaned from the cited references and the knowledge that was within the level of ordinary skill in the art at the time the claimed invention was made and not on knowledge gleaned from the Applicant's disclosure. *See* MPEP § 2145, for example.

Once again, Appellant submits that the Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness with respect to claims 1-18. According to MPEP § 2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

All of the teachings of the cited references must be considered, even disclosures that teach away from the claimed invention. See MPEP § 2141.02. In addition, the proposed combination cannot render the cited references unsatisfactory for their intended purpose or change the principle of operation of a reference. See MPEP § 2143.01, for example. Thus, it is improper to combine references where the references teach away from their combination. See MPEP § 2145, for example.

Appellant respectfully submits that Tso, WinRoute, and Burns, whether taken alone or in combination, are insufficient to establish a *prima facie* case of obviousness with respect to independent claims 1-18. Appellant submits claims 1-18 are allowable for at least this reason. Appellant further submits that claims 2-7, 9-14, and 16-18 are allowable by virtue of their dependency, as well as on their own merits.

In view of the foregoing arguments, Appellant respectfully requests the Board to overturn the § 103(a) rejections of claims 1-18.

Respectfully submitted,

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Under 37 CFR 1.34(a)

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